## **Rob Cook**

Deputy Commissioner and Director, Technology Transformation Service General Services Administration (GSA)



Rob Cook was the co-architect and primary author of Pixar's RenderMan software, which creates photo-realistic computer images for animation, effects, and design. RenderMan revolutionized special effects and has long dominated the industry: for 20 of the last 21 years, the Visual Effects Oscar has gone to a film that used RenderMan. In 2001, he received an Oscar for his contributions, the first Oscar ever given for software. He has received numerous other awards including the ACM SIGGRAPH Coons Award (the highest professional honor in

computer graphics), and he has been elected to both the Academy of Motion Picture Arts and Sciences and the National Academy of Engineering.

Cook began his career as a software engineer and researcher. He holds a B.S. in physics from Duke and an M.S in computer graphics from Cornell. At Cornell, he worked on simulating realistic surfaces, taking computer-generated images beyond the plastic, artificial look they had at the time. At Lucasfilm/Pixar, he developed the first programmable shader, now an essential part of GPUs and game engines as well as high-end renderers. He was the first to use Monte Carlo techniques in computer graphics, which were essential for simulation of complex, realistic lights and camera effects. The latter proved particularly important in the special effects industry, because it allowed computer-generated imagery to match the motion blur and depth of field of the live-action footage with which it was combined.

Cook also has over 25 years of experience as a business leader, including being VP of Software Development at Pixar, running two successful startup companies, serving on corporate and non-profit boards, and consulting at several leading companies in Silicon Valley. In 2016 he became the Commissioner of GSA's Technology Transformation Service.